REDACTED VERSION

United States District Court
Northern District of California

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

SPACE DATA CORPORATION,

Plaintiff,

v.

ALPHABET INC., et al.,

Defendants.

Case No. 16-cv-03260-BLF

ORDER GRANTING IN PART AND DENYING IN PART AND DEFERRING IN PART DEFENDANTS' MOTION FOR SUMMARY JUDGMENT

[Re: ECF 411]

This is a case about balloons, floating way up high—approximately 60,000 to 100,000 feet above the surface of the Earth. Each side possesses high-altitude balloon technology. And each side endeavors to place constellations of balloons in the stratosphere to deliver wireless communication to users on the ground. Plaintiff Space Data Corporation ("Space Data") asserts that Defendants Alphabet Inc., Google LLC, and Loon LLC (collectively, "Google") improperly make use of Space Data's protected balloon know-how. More specifically, Space Data contends that its balloons came first in time and that Google's "Project Loon"—a high-altitude balloon project—infringes Space Data's patents and unlawfully uses Space Data's confidential information and trade secrets.

Presently before the Court is Google's Motion for Summary Judgment. ECF 411. For the reasons discussed below, Google's Motion for Summary Judgment is GRANTED IN PART and DENIED IN PART and DEFERRED IN PART.

I. PROCEDURAL HISTORY

On June 13, 2016, Space Data filed the original complaint in this action, asserting four causes of action—infringement of one patent, federal trade secret misappropriation, state trade

secret misappropriation, and breach of contract. *See generally* Original Compl., ECF 1. On September 30, 2016, Space Data filed a first amended complaint asserting the same four causes of action. ECF 28. On February 16, 2017, the Court dismissed the trade secret claims and breach of contract claim with leave to amend. ECF 59. On April 20, 2017, Space Data filed a second amended complaint with the same causes of action. ECF 91. On July 14, 2017, the Court granted in part Google's motion to dismiss the trade secret claims and breach of contract claim in the second amended complaint, again with leave to amend, and granted Space Data leave to assert infringement of three additional patents. *See generally* ECF 142. Space Data subsequently filed a third amended complaint asserting seven causes of action. ECF 144. On December 18, 2017, the Court denied Google's motion to dismiss the third amended complaint. ECF 176.

On August 17, 2018, the Court granted the parties' stipulation to the filing of a fourth amended complaint adding Loon LLC as a defendant. ECF 340. Finally, on February 1, 2019, the Court granted Space Data leave to file a fifth amended complaint ("5AC") adding Certificates of Correction concerning two of the asserted patents. *See generally* ECF 431. Thereafter, on February 13, 2019, Space Data filed the operative 5AC, asserting the following seven causes of action:

(1) Count I for infringement of U.S. Patent No. 6,628,941 ("the '941 patent");

(2) Count II for trade secret misappropriation under the Defend Trade Secrets Act ("DTSA"), 18 U.S.C. §§ 1836 & 1837;

(3) Count III for trade secret misappropriation under the California Uniform Trade Secrets Act ("CUTSA"), Cal. Civ. Code § 3426, *et seq.*;

(4) Count IV for breach of written contract;

(5) Count V for infringement of U.S. Patent No. 9,632,503 ("the '503 patent");

(6) Count VI for infringement of U.S. Patent No. 9,643,706 ("the '706 patent"); and

(7) Count VII for infringement of U.S. Patent No. 9,678,193 ("the '193 patent").

See generally 5AC, ECF 434. On February 27, 2019, Google answered Space Data's 5AC and asserted counterclaims for declaratory judgment of invalidity and non-infringement of the asserted patents, and unenforceability of the '193 Patent. *See generally* Answer to 5AC, ECF 465. On

March 13, 2019, Space Data answered Google's counterclaims. *See generally* Answer to Counterclaims, ECF 478.

On May 18, 2018, the Court denied Space Data's motion for partial summary judgment that Google is judicially estopped from claiming that the asserted claims in the '193 patent are invalid under 35 U.S.C. §§ 101, 102, and/or 103. *See* ECF 255. On September 6, 2018, the Court issued its Order Construing Claims and found all asserted claims of the '941 and '503 patents invalid for indefiniteness. *See* ECF 352 at 25–26. As a result, only the '193 and '706 patents remain live in this action following claim construction.

On November 7, 2018, the Patent Trial and Appeal Board ("PTAB") of the U.S. Patent and Trademark Office ("PTO") instituted *inter partes* review ("IPR") on all asserted claims of the '706 patent. *See* Pransky Decl. ¶¶ 4–5, ECF 374-2; Exs. A & B to Pransky Decl., ECF 374-3, 374-4. Google then moved to stay Space Data's claim for infringement of the '706 patent pending completion of the '706 patent IPR proceedings. ECF 374. On March 12, 2019, the Court denied Google's motion to stay the '706 patent infringement claim. ECF 477.

On January 11, 2019, Google filed the instant Motion for Summary Judgment. ECF 411. Four days later, Google filed a Corrected[1] Motion for Summary Judgment ("Motion"). Motion, ECF 416-4. On April 11, 2019, the Court heard oral argument on Google's Motion ("the Hearing").

II. LEGAL STANDARD

Federal Rule of Civil Procedure 56 governs motions for summary judgment. Summary judgment is appropriate "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986). "Partial summary judgment that falls short of a final determination, even of a single claim, is authorized by Rule 56 in order to limit the issues to be

[1] After Google filed its corrected motion the original motion remained noticed at ECF 411. Thus, ECF 411 refers only to the noticed docket number; the operative briefing is at ECF 416-3 (redacted) and ECF 416-4 (unredacted).

tried." *State Farm Fire & Cas. Co. v. Geary*, 699 F. Supp. 756, 759 (N.D. Cal. 1987).

The moving party "bears the burden of showing there is no material factual dispute," *Hill v. R+L Carriers, Inc.*, 690 F. Supp. 2d 1001, 1004 (N.D. Cal. 2010), by "identifying for the court the portions of the materials on file that it believes demonstrate the absence of any genuine issue of material fact," *T.W. Elec. Serv. Inc. v. Pac. Elec. Contractors Ass'n*, 809 F.2d 626, 630 (9th Cir. 1987). In judging evidence at the summary judgment stage, "the Court does not make credibility determinations or weigh conflicting evidence, and is required to draw all inferences in a light most favorable to the nonmoving party." *First Pac. Networks, Inc. v. Atl. Mut. Ins. Co.*, 891 F. Supp. 510, 513–14 (N.D. Cal. 1995). For a court to find that a genuine dispute of material fact exists, "there must be enough doubt for a reasonable trier of fact to find for the [non-moving party]." *Corales v. Bennett*, 567 F.3d 554, 562 (9th Cir. 2009).

III. STATEMENT OF FACTS

Space Data was founded in 1998 and has been developing its balloon technology since that time. *See* Knoblach Decl. ¶¶ 8, 12, ECF 448-5. According to Mr. Gerald Knoblach, a founder of Space Data and its Chairman and CEO, the company operates in the balloon communications space and provides balloon-based networking and deployable communications services for first responders. *Id.* ¶ 11. One of Space Data's objectives is to provide wireless service using a fleet or constellation of balloons located in the stratosphere, at an altitude of approximately 60,000 to 100,000 feet. *See* 9/6/2007 Sacca email, Ex. 42 to Opp'n, ECF 440-2.

Space Data and Google met over a period of about six months in 2007-2008 to discuss Google's potential investment or acquisition of Space Data. In September 2007, Space Data met with Google in Mountain View, CA, and provided Google with a summary of Space Data's history, business, and patent portfolio. *See* Knoblach Depo. at 122:6–15, 123:6–16, 123:20–25, Ex. 42 to Opp'n, ECF 440-2. Space Data owns a portion of the 900 MHz spectrum.[2] Shortly after the September 2007 meeting, [redacted]

[2] According to Space Data, Google planned to bid on the 700 MHz spectrum at auction, while simultaneously pursuing Space Data's technology and 900 MHz spectrum "to accelerate the buildout of any 700 MHz spectrum Google might acquire." 5AC ¶¶ 74, 76, 95.

[redacted] third party had valued Space Data's spectrum at $140M and expressed the view that acquiring [redacted] *See id.* In November 2007, the parties held a second meeting in Mountain View, this time to discuss at a high level how Space Data could apply its technology to provide broadband from its platform. *See* Knoblach Depo. at 160:2–161:25.

As the discussions progressed, the parties entered into a Mutual Confidentiality and Nondisclosure Agreement ("NDA"), effective December 1, 2007. *See generally* NDA, Ex. A to 5AC, ECF 434-1. The NDA expressly states that "**[n]o party acquires any intellectual property rights under this Agreement** . . . except the limited rights necessary to carry out the purposes set forth in this Agreement." NDA ¶ 8 (emphasis added). However, the NDA recognizes "that Google may in the future develop products or services related to or similar to the subject matter of the Confidential Information disclosed under [the NDA]." *Id.* The NDA further provides that "Google may use Residuals"—i.e., Space Data information "**retained in the unaided memories of Google employees or Representatives** who had access to Confidential Information" under the NDA—"**for any purpose**, including without limitation, use in the acquisition, development, manufacture, promotion, sale, or maintenance of products and services." *Id.* (emphasis added). The NDA states that "[a] person's memory is unaided if such person has not intentionally memorized the Confidential Information for the purpose of retaining and subsequently using or disclosing it." *Id.* (emphasis added).

On December 4, 2007, Google requested that Space Data share certain detailed financial information and potential uses for the balloon technology. *See* 12/4/2007 Pearson email, Ex. 46 to Opp'n, ECF 440-10. The parties subsequently participated in multiple technical conference calls and Google began performing technical due diligence on Space Data's weather balloons and technology. *See, e.g.*, 1/2/2008 Wiesenberg email, Ex. 52 to Opp'n, ECF 441-4; 12/21/2007 Ingersoll email, Ex. 56 to Opp'n, ECF 441-12. Larry Page and Sergey Brin attended multiple meetings with Space Data. *See* Knoblach Depo. at 123:6–12, 161:3–6, Ex. 42 to Opp'n,

ECF 440-2. On December 18, 2007, a Google employee wrote [redacted] *See* 12/18/2007 Conrad email, Ex. 44 to Opp'n, ECF 440-6; *see also* 12/4/2007 Sacca email [redacted], Ex. 44 to Opp'n, ECF 440-6. In January 2008, Google internally discussed terms contemplating acquisition of Space Data's intellectual property. *See* 1/18/2008 Pearson email, Ex. 51 to Opp'n, ECF 441-2.

On February 15, 2008, in conjunction with the parties' discussions, numerous Google personnel toured Space Data's facilities in Arizona. *See* Knoblach Decl. ¶ 7, ECF 448-5. The Google team launched two Space Data balloons from Space Data's parking lot, visited Space Data's network operation center ("NOC") and balloon manufacturing areas, ate lunch in a conference room, and observed on monitors in the NOC the balloons that had been launched before lunch. *See* Knoblach Depo. at 237:4–238:21, 239:24–240:21, Ex. 9 to Motion, ECF 407-10. The visit lasted approximately four and a half hours. *See* Knoblach Depo. at 324:1–4, 328:18–20, Ex. 16 to Motion, ECF 411-2. Google brought five cameras to the tour and took numerous pictures, Germinario Decl. ¶¶ 3–9, ECF 448-6, and Google employees took notes during the tour, *see, e.g.*, *id.* ¶ 11 (citing to Exs. 71 & 72 to Opp'n, ECF 442-22 & 442-24).

Google's contemplated acquisition of Space Data did not come to pass. On February 24, 2008, Google informed Space Data that it was not interested in additional conversations at this time, *see* 2/24/2008 Ingersoll email, Ex. 17 to Motion, ECF 408-6, and negotiations permanently ceased, *see* Page Depo. at 22:6–19, ECF 408-8.

In 2009, Google's "X" research and development group circulated a list of ideas authored by Mr. Sebastian Thrun that included the idea of deploying high-altitude balloons to create an airborne "Internet backbone." *See* Ex. 27 to Motion, ECF 409-8; Teller Depo. Tr. at 23:16–24:20, Ex. 21 to Motion, ECF 409-1. In November 2010, Google's Larry Page asked Mr. Thrun to [redacted] and mentioned aspects of Space Data's approach. *See* 11/15/2010 Page email, Ex. 85 to Opp'n, ECF 443-10. In June 2011, Mr. Richard DeVaul joined Google X. *See* DeVaul Depo. at 7:24–25, Ex. 22 to Motion, ECF 409-3. In July 2011, Mr. DeVaul diagrammed a balloon network node and created a spreadsheet assessing a balloon network. *See* Exs. 91 & 92 to

Opp'n, ECF 443-20 & 443-22. In August 2011, Mr. DeVaul's colleague, Mr. Josh Weaver, wrote to Google engineers, asking them to share lessons learned from the "venture" with Space Data in 2008. *See* 8/11/2011 Weaver email, Ex. 97 to Opp'n, ECF 443-32.

Google X's balloon project eventually became known as "Loon" or "Project Loon," *see* Biffle Depo. at 5:14–7:1, Ex. 23 to Motion, ECF 409-5, and Loon launched its first test balloon in or around August 2011, *see id.* at 32:6–9. Loon made its first publicly announced balloon launch in June 2013. Based on the parties' interactions in 2007 and early 2008, and Google's subsequent development of Loon, Space Data now accuses Google of breaching the parties' NDA and of misappropriating its trade secrets in connection with Google's development of Loon. *See generally* 5AC.

On the patent front, Space Data and Google have each filed patent applications relating to balloon communicating systems. One of Google's patent applications was issued as U.S. Patent No. 8,820,678 (the "'678 patent") on September 2, 2014. Ex. A to Pransky Decl., ECF 225-2. Shortly before the '678 patent issued, on July 10, 2014, Space Data filed an application which became Patent Application No. 14/328,331 (the "'331 application"). Ex. B to Pransky Decl., ECF 225-3. In 2015, Space Data provoked an interference proceeding at the PTO and asserted that the claims in the '331 application had priority over those in Google's '678 patent. Ex. C to Pransky Decl. (Letter to Commissioner of Patents dated April 24, 2015), ECF 225-4. Google did not contest priority in the interference proceeding. As a result, the PTO's Patent Trial and Appeal Board ("PTAB") issued a ruling in Space Data's favor. Ex. 8 to Hosie Decl. (Interference Judgment entered August 31, 2016), ECF 185-9. Space Data's '331 application issued as the '193 patent on June 13, 2017. Ex. D to Pransky Decl., ECF 225-5.

Relevant to the instant motion, Space Data alleges that Google's Project Loon infringes Space Data's '193 and '706 patents. *See generally* 5AC.

IV. DISCUSSION

Google moves for summary judgment of (1) non-infringement of the '193 patent; (2) no willful infringement of either the '193 patent or '706 patent; (3) no misappropriation of trade secrets under either DTSA or CUTSA; and (4) no breach of written contract (the NDA). *See*

Motion at 1, 3, ECF 416-4. The Court addresses each issue in turn. As discussed below, Google's motion is GRANTED IN PART and DENIED IN PART and DEFERRED IN PART.

A. The '193 Patent

Space Data accuses Google's Project Loon of literal[3] infringement of the '193 patent. Each accused claim includes the step of "determining locations of one or more neighbor balloons **relative to** the determined location of the target balloon." *See* Motion at 4 (emphasis added); '193 patent at 50:37–49, 51:34–49, 52:5–25, Ex. 1 to Motion, ECF 411-2; 5AC ¶¶ 381–405. Claim 1 is representative and recites:

> 1. A method comprising:
>
> determining a location of a target balloon;
>
> **determining locations of one or more neighbor balloons relative to the determined location of the target balloon**, wherein the target balloon comprises a communication system that is operable for data communication with at least one of the one or more neighbor balloons;
>
> determining a desired movement of the target balloon based on the determined locations of the one or more neighbor balloons relative to the determined location of the target balloon, wherein the desired movement of the target balloon comprises a desired horizontal movement of the target balloon; and
>
> controlling the target balloon based on the desired movement of the target balloon, wherein controlling the target balloon based on the desired movement of the target balloon comprises controlling an altitude of the target balloon based on the desired horizontal movement of the target balloon.

'193 patent at 50:37–67 (emphasis added).

Google's motion for summary judgment of non-infringement of the '193 patent therefore turns on a single question—whether the accused Loon system practices the "**determining locations . . . relative to . . .**" limitation. *See* '193 patent at 50:39–40 (emphasis added); Motion at 4. Google argues that the accused Loon system does not literally meet this claim limitation as a matter of law because the undisputed facts reveal that Loon never determines the location of a neighbor balloon *relative to* the location of a target balloon, but rather determines only the

[3] Space Data's 5AC additionally alleges infringement under the doctrine of equivalents; however, Google notes that Space Data did not disclose a doctrine-of-equivalents theory in its infringement contentions or in Dr. Pullen's (Space Data's infringement expert) report, *see* Motion at 2, 7. Space Data makes no argument to the contrary. Accordingly, Space Data is precluded from asserting infringement of the '193 patent under the doctrine of equivalents.

absolute locations of the neighbor and target balloons. *See* Motion at 6. Space Data counters that Google is improperly arguing claim construction at summary judgment, that in any event Google's interpretation of the "relative to" limitation is incorrect, and that Loon does in fact practice the limitation as properly interpreted. *See* Opp'n at 15–22, ECF 439-5. As discussed below, the Court agrees with Google.

First, Google's argument is not improper at summary judgment. Google is not seeking claim construction, but instead summary judgment of non-infringement based on whether Loon practices a certain limitation of the '193 patent. In doing so, Google (and Google's expert Dr. Hansman) rely on the plain and ordinary meaning of the term at issue. *See* Motion at 4; Hansman Expert Report ¶ 140, Ex. A to Hansman Decl., ECF 410-13. Dr. Hansman submits that "relative location" has a standard meaning to one of skill in the art, defined as "a location that is measured in relation to some other object or reference point." *See id.* Indeed, terms are to be "given their ordinary and accustomed meaning" unless the patentee sets forth a "special and particular definition." *See Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1249 (Fed. Cir. 1998); *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). Here, Space Data's own expert (Dr. Pullen) admits that "relative . . . location" is not "particularly technical" and "could be understood by the ordinary lay person." *See* Pullen Decl. ¶ 60, Ex. 185 to Opp'n, ECF 452-29. In addition, Dr. Pullen testified that a reference point is required[4] "in order to determine relative locations." Pullen Depo. at 195:15–24, Ex. 3 to Motion, ECF 407-6. Dr. Pullen further testified that "relative distance means distance relative to other objects." Pullen Depo. at 60:1–9, Ex. 24 to Motion, ECF 411-2. Thus, both experts effectively agree that a plain and ordinary meaning should govern.

Moreover, contrary to Space Data's suggestion, *see* Opp'n at 17–18, the instant "**determining locations . . . relative to . . .**" term was not construed in the Court's *Markman* order. Rather, the Court construed the "**determining [] movement . . . relative to . . .**" term found elsewhere in claim 1 of the '193 patent. *See* Order Construing Claims at 13 (emphasis added),

[4] In the same testimony Dr. Pullen postulated that "[t]here might be an exception" to this requirement but admitted he "c[ould]n't think of any right [] at hand."

ECF 352. Google is not asking the Court to revisit its prior constructions, and the Court does not find Google's current position inconsistent with its earlier claim construction arguments. In sum, Google's request for a plain and ordinary meaning is proper.

Second, the Court is unpersuaded by Space Data's instant argument that "the appropriate understanding of 'relative location' is more general than that used 'in common parlance.'" *See* Opp'n at 20 (quoting Pullen Depo. at 322:23–323:17, Ex. 184 to Opp'n, ECF 452-28). In this testimony, Dr. Pullen ascribes a broader meaning to the words "relative location," positing that in the context of the '678[5] and '193 patents, "[y]ou don't need a separate derivation step" to "derive a relative location from two, quote/unquote, absolute positions plotted in the same coordinate frame." *See* Pullen Depo at 323:13–22, 324:7–15, Ex. 184 to Opp'n, ECF 452-28. Dr. Pullen appears to argue that the "**determining locations . . . relative to . . .**" limitation in the '193 patent is met simply "[f]rom [having] two locations in the same coordinate frame, [from which] you can observe their location relative to each other," *see id.* at 185:16–21. Indeed, Space Data advances precisely this argument—"that balloons tracked on the same map are determined relative to one another." *See* Opp'n at 17.

Based on Space Data's argument, it appears clear that it is Space Data who now seeks claim construction in order to defeat Google's argument. Space Data would have this Court read into a non-technical term specialized meaning nowhere present in the patent specification. Although the patentee may be his own lexicographer, Space Data and Dr. Pullen submit no evidence or citation to the record in support of their proposed interpretation, a reading that would allow the "**determining locations . . . relative to . . .**" limitation to be met simply by observing two absolute locations in the same coordinate frame, without a separate derivation step of the actual relative locations. Space Data cites to a portion of the '678 patent specification alluding to possible "[o]ther methods for determining the locations of the one or more neighbor balloons." *See* Opp'n at 19 (quoting '678 patent at 22:15–25, Ex. 179 to Opp'n, ECF 452-23). But, this disclosure in no way alters the plain and ordinary meaning of the "**determining locations . . .**

[5] The '678 patent is part of the '193 patent prosecution record.

relative to . . ." limitation which on its face requires an actual determination of relative locations. Likewise, Space Data's citations to the '193 patent specification are inconsequential. *See* Opp'n at 19 (citing '193 patent at 30:25–27, 31:52–60, 34:5–11). Simply put, Space Data offers nothing to indicate that a person of ordinary skill in the art at the time of the invention would have understood the "**determining locations . . . relative to . . .**" step to be accomplished merely by observing or tracking absolute locations in the same coordinate frame. To move away from the plain and ordinary meaning, "the patentee must clearly express an intent to redefine the term." *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1365–66 (Fed. Cir. 2012) (internal quotation and citation omitted). The record reveals no such intent here. Accordingly, a plain reading of the claims prohibits Space Data's interpretation. *See id.*

Third, Space Data submits no evidence that the accused Loon system determines or derives locations of one or more neighbor balloons relative to the target balloon. Space Data argues that Loon practices this claim limitation because "Google tracks its balloons on the same map; all balloons are mapped relative to one another as shown [] in Google's 'SmallWorld' tracking GUI." *See* Opp'n at 22 (citing Ex. 194 to Opp'n, ECF 452-38). That argument is not persuasive. A map displaying balloons relative to each other is not evidence that the Loon system determines, derives, or calculates the location of even a single balloon relative to another. While mapping is indicative of the system's *ability* to make such a determination, it is not evidence that the determination actually occurs. Indeed, Dr. Pullen admits that Loon operates using absolute coordinates—"Loon Mission Control continuously determines the location of each and every one of Loon's balloons . . . **those determinations of location include**, among other data points, **each balloon's latitude, longitude, altitude, and time**." *See* Appendix A to Pullen Expert Report ¶ 305 (emphasis added), Ex. 2 to Motion, ECF 407-5. Furthermore, Google's expert Dr. Hansman offers unrebutted testimony that none of the accused Loon algorithms uses the relative location of a balloon compared to neighboring balloons. *See* Hansman Rebuttal Expert Report ¶¶ 81, 113, 172, Ex. A to Hansman Decl., ECF 410-13.

Space Data further argues that "Loon would not work" if it did not make relative determinations. *See* Opp'n at 23. But yet again, Space Data offers no evidence in support, and so

too does this argument fail.

In sum, the Court finds no genuine issue of material fact as to infringement of the '193 patent and that Google is entitled to judgment as a matter of law. *Celotex*, 477 U.S. at 323. Accordingly, Google's motion for summary judgment of non-infringement of the '193 patent is GRANTED.

B. Willful Infringement

Google moves for summary judgment that Google has not willfully infringed the '193 and '706 patents. *See* Motion at 10. Willful infringement of the '193 patent is moot, the Court having granted summary judgment of non-infringement of the '193 patent. *See supra* Section IV.A.

As to the '706 patent, Space Data is not seeking damages but only injunctive relief. *See* Opp'n at 25; Meyer Expert Report ¶ 5, Ex. 8 to Motion, ECF 407-8. Thus, there is no possibility of damages to enhance under 35 U.S.C. § 284 based on a finding of willful infringement. Accordingly, Google's motion for summary judgment of no willful infringement is MOOT with respect to enhanced damages for willful infringement of the '706 patent and is otherwise DEFERRED to post-trial motions.

This ruling in no way precludes or affects Space Data's claim for attorney fees pursuant to 35 U.S.C. § 285. Willfulness of infringement may be relevant to that inquiry. *See Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1340 (Fed. Cir. 2004). However, attorney fees is an issue for the Court. Should the Court reach the issue of attorney fees, evidence pertaining to willfulness may be submitted to the Court at that stage, along with any evidentiary objections.

C. Misappropriation of Trade Secrets

Space Data accuses Google of trade secret misappropriation under DTSA and CUTSA. *See* 5AC ¶¶ 298, 307. Google moves for summary judgment of Space Data's DTSA and CUTSA claims. *See* Motion at 3, 14, 17.

As a starting point, the Court notes that Google seeks summary judgment on these claims on the grounds that Space Data has no evidence that Google used or disclosed any of the asserted trade secrets except as permitted by the parties' NDA. *See* Motion at 17. Space Data does not allege that Google wrongfully possessed Space Data's trade secrets in the first instance. Nor does

Space Data allege that Loon in its present form makes use of the asserted trade secrets wholesale. *See, e.g.*, Knoblach Depo. at 24:15–25:22 (acknowledging that Loon uses a different type of balloon and a different type of altitude control), Ex. 9 to Motion, ECF 407-10. Rather, Space Data alleges that its trade secrets were disclosed to Google under the parties' NDA and that Google subsequently wrongfully used Space Data's trade secrets in connection with developing and executing Project Loon. *See, e.g.*, 5AC ¶¶ 16, 186–88, 300, 309. In other words, Space Data's trade secret claims principally[6] allege improper use in Google's consideration and development of Loon, notwithstanding use permitted by the NDA. *See O2 Micro Int'l Ltd. v. Monolithic Power Sys., Inc.*, 399 F. Supp. 2d 1064, 1072 (N.D. Cal. 2005) (recognizing that employing confidential information in research or development that embodies the trade secret constitutes use).

Space Data submits no expert opinion regarding trade secret misappropriation and relies solely on circumstantial evidence. *See* Opp'n at 9–10, 10–13. However, expert opinion is not required to prove misappropriation. *See BladeRoom Group Ltd. v. Emerson Electric Co.*, 331 F. Supp. 3d 977, 981 (N.D. Cal. 2018). Moreover, Space Data may prove trade secret misappropriation with circumstantial evidence "because direct evidence of misappropriation is rare." *Id.* at 984. Indeed, "[i]t is well recognized with respect to trade secrets that . . . [i]n most cases plaintiffs must construct a web of perhaps ambiguous circumstantial evidence from which the trier of fact may draw inferences which convince him that it is more probable than not that what plaintiffs allege happened did in fact take place." *See id.* (internal citation omitted). Yet, to survive summary judgment, Space Data "must set forth non-speculative evidence of specific facts, not sweeping conclusory allegations." *Cafasso, U.S. ex rel. v. Gen. Dynamics C4 Sys., Inc.*, 637 F.3d 1047, 1061 (9th Cir. 2011).

Google argues that Space Data has identified no evidence "sufficient to raise a genuine issue of material fact regarding whether Google improperly used or disclosed any of Space Data's asserted trade secrets or other confidential information." *See* Motion at 18. Google contends that Space Data "[at] most [] can point to [] a few internal communications mentioning Space Data

[6] Space Data also alleges ongoing improper use of its trade secrets. *See, e.g.*, 5AC ¶ 191.

between 2008 and 2011," but argues that "none of those touch on any of Space Data's asserted trade secrets or other confidential information." *Id.* In other words, Google argues that Space Data "fails to offer any actual evidence of Google's disclosure or misuse of any of Space Data's twenty-four asserted trade secrets or any other alleged item of confidential information." *Id.* at 20. Google additionally argues that even if there were some evidence of use, Space Data has failed to show that any information used by Google was not a protected "Residual" within the meaning of the parties' NDA. *See id.* at 24. Space Data counters that based on the evidence a jury could reasonably find that Google improperly used Space Data's trade secrets and that the information used does not fall within the NDA's "Residuals" clause. *See, e.g.*, Opp'n at 12. As discussed below—by an extremely thin margin and drawing all inferences for Space Data, as the Court must at summary judgment—the Court finds genuine issues of material fact precluding summary judgment.

Space Data alleges misappropriation of four[7] categories of trade secrets: Wind Data, Thermal Management, NOC Altitude Control and Monitoring Systems, and Financial Information and Business Model. *See generally* Fifth Amended § 2019.210 Trade Secret Disclosure, Ex. 5 to Motion, ECF 408-5. Space Data presents evidence that its wind data, thermal management, and NOC trade secrets were "on display" or "shown to" Google during the February 15, 2008 tour. *See* Knoblach Decl. ¶ 10, ECF 448-5; Knoblach Depo. at 378:23–381:20, 386:4–387:8, Ex. 132 to Opp'n, ECF 444-33; Knoblach Depo. at 484:9–25, Ex. 144 to Opp'n, ECF 453-5; Ex. 145 to Opp'n, ECF 445-5. With respect to its financial information trade secrets, Space Data provided Google with confidential financial information, including budgets, projections, cost models, and contracts. *See, e.g.*, 12/14/2007 Wiesenberg email, Ex. 142 to Opp'n, ECF 445-3.

The central question is thus whether Space Data has put forth sufficient evidence of unauthorized use of these trade secrets by Google in developing or executing Loon to survive summary judgment. Google relies on *Stratienko v. Cordis Corp.*, 429 F.3d 592 (6th Cir. 2005) for the proposition that Space Data "must demonstrate similarity between [its] **secret idea** (not [its]

[7] Space Data has withdrawn its hover algorithm trade secrets, a fifth category. *See* Opp'n at 14 n.1.

product in general) and [Google's] device." *Id.* at 602 (emphasis in original); *see also* Reply at 11. Although *Stratienko* is a Sixth Circuit case and not binding authority, the Court agrees that Space Data must provide evidence sufficient to support a reasonable inference that Google used Space Data's actual trade secrets and not merely general product features or characteristics. For example, as discussed at the Hearing, macro-level similarities between the parties' products are not on their own sufficient—such as side-by-side pictures that reveal nothing other than a balloon with an attached platform in each system, *see* Ex. 96 to Opp'n, ECF 443-30. However, as outlined below, the Court finds that Space Data has—by a narrow margin—sufficiently set forth non-speculative circumstantial evidence from which a reasonable trier of fact could, drawing all inferences for Space Data, find trade secret misappropriation. *Corales v. Bennett*, 567 F.3d 554, 562 (9th Cir. 2009).

The Court notes that any disputed facts discussed within this section or elsewhere in this order are not to be taken as an exhaustive list.

First, Space Data presents evidence that Google had access to Space Data's wind data, thermal management, and NOC trade secrets by virtue of the February 15, 2008 tour of Space Data's facility and operations ("the Tour") and preceding discussions. *See, e.g.*, Knoblach Decl. ¶¶ 7, 10–13; Ex. 145 to Opp'n, ECF 445-5; Knoblach Depo. at 378:23–381:20, 386:4–387:8, Ex. 132 to Opp'n, ECF 444-33; Knoblach Depo. at 484:9–25, Ex. 144 to Opp'n, ECF 453-5; Ex. 145 to Opp'n, ECF 445-5. Google brought five cameras to the Tour and took numerous pictures, Germinario Decl. ¶¶ 3–9, ECF 448-6, and Google employees took notes during the Tour, *see, e.g.*, *id.* ¶ 11 (citing to Exs. 71 & 72 to Opp'n, ECF 442-22 & 442-24). Google also had direct access to Space Data's financial information trade secrets. *See, e.g.*, 12/14/2007 Wiesenberg email, Ex. 142 to Opp'n, ECF 445-3. Second, Space Data presents evidence that Google had interest in acquiring Space Data but ceased negotiations shortly after gaining full access to Space Data's trade secrets. *See* 2/24/2008 Ingersoll email, Ex. 17 to Motion, ECF 408-6; Page Depo. at 22:6–19, ECF 408-8.

Third, Google constructed an internal website—a so-called "Wiki" page—to host information in Google's possession that pertained to Space Data, including internal Google notes

regarding Space Data's technology. *See, e.g.*, 2/12/2008 Ingersoll email ("I've collected notes that should reflect our latest thinking about [Space Data] on a wiki: http://wiki/Main/SpaceData."), Ex. 48 to Opp'n, ECF 440-14. The Wiki contained Space Data's confidential information—for example, Space Data's financial statements. *See* Wiki, Ex. 50 to Opp'n, ECF 440-18; Motion at 20 (acknowledging that the Wiki may have contained Space Data's confidential financial statements). Space Data presents evidence that [redacted]. *See* Google's Response to Interrogatory No. 29, Ex. 111 to Opp'n, ECF 444-21; Pearson Depo. at 26:5–24, Ex. 110 to Opp'n, ECF 444-19. [redacted]. *See* Google's Supplemental Response to Interrogatory No. 29, Ex. 111 to Opp'n, ECF 444-21; 10/15/2011 DeVaul email, Ex. 101 to Opp'n, ECF 444-1. Google's records show that numerous Google employees visited the Wiki [redacted] *See* Google's Supplemental Response to Interrogatory No. 29. At least one Google employee (Dan McCloskey) who had access to the Wiki URL and later consulted on Loon testified that he "was not" aware that Google and Space Data had an NDA pertaining to the 2008 visit and could not recall if he "w[as] allowed to share Space Data data with [other Loon employees]." *See* McCloskey Depo. at 210:3–23, Ex. 82 to Opp'n, ECF 443-4; McCloskey Google Resume, Ex. 98 to Opp'n, ECF 443-34.

In addition, leading up to the Tour, Space Data and the "Google Team" participated in technical conference calls. *See, e.g.*, 1/2/2008 Wiesenberg email, Ex. 52 to Opp'n, ECF 441-4. Google engineer Phil Gossett was a member of the "Google Team." *Id.* On February 13, 2008, Mr. Gossett wrote, "I added some stuff to the SpaceData wiki, both on my vision of how we might use this stuff, [redacted]." *See* 2/13/2008 Gossett email, Ex. 55 to Opp'n, ECF 441-10. [redacted] *See* Wiki at "Speculative use" section, Ex. 55 to Opp'n, ECF 441-10. Shortly thereafter, during the Tour, Google was exposed to how Space Data achieved this ability. *See, e.g.*, Knoblach Depo. at 378:23–381:20 (discussing wind data and altitude information on display during the Tour),

Ex. 132 to Opp'n, ECF 444-33.

Fourth, such an ability appears in Space Data's disclosure of trade [redacted] *See* Fifth Amended § 2019.210 Trade Secret Disclosure at 1, Ex. 5 to Motion, ECF 408-5. As discussed below, Space Data presents evidence sufficient for a reasonable jury to conclude that Google used this [redacted] conclusion or other trade secrets in developing Loon.

In November 2010, Google's Larry Page asked Sebastian Thrun to [redacted] and mentioned aspects of Space Data's approach. *See* 11/15/2010 Page email, Ex. 85 to Opp'n, ECF 443-10. In June 2011, Mr. Richard DeVaul joined Google X. *See* DeVaul Depo. at 7:24–25, Ex. 22 to Motion, ECF 409-3. As previously discussed, the Space Data "Wiki" page was accessible [redacted]. On July 11, 2011, Google's Astro Teller accepted an invitation from Mr. DeVaul to participate in a meeting to "[b]rainstorm around WiFi/WiMax delivery to remote, hostile, or otherwise unconnected regions using station-keeping balloons as low-earth-orbit comms satellites." *See* Ex. 90 to Opp'n, ECF 443-18. This meeting was set for July 13, 2011 and included Mr. Thrun as well as other Google employees. *Id.* In July 2011, Mr. DeVaul diagrammed a balloon network node and created a spreadsheet assessing a balloon network. *See* Exs. 91 & 92 to Opp'n, ECF 443-20 & 443-22. [redacted]. *See* 7/28/2011 DeVaul Spreadsheet, Ex. 92 to Opp'n, ECF 443-22. Mr. DeVaul proposed a cost of [redacted] *see id.*, in the ballpark of the [redacted] figure found in the Space Data Wiki and part of Space Data's financial information trade secret, *see* Wiki, Ex. 50 to Opp'n, ECF 440-18; Fifth Amended § 2019.210 Trade Secret Disclosure at 11, Ex. 5 to Motion, ECF 408-5. Taken as a whole, a reasonable trier of fact could infer from this evidence that Mr. DeVaul accessed and used Space Data's confidential information in or around June or July 2011, via the

Wiki page, Mr. Thrun, other Google employees, or some combination thereof.

Fifth, in August 2011, Mr. DeVaul's colleague, Mr. Josh Weaver, wrote to Google engineers, asking them to share lessons learned from the "venture" with Space Data in 2008. *See* 8/11/2011 Weaver email, Ex. 97 to Opp'n, ECF 443-32. Mr. Gossett and other Google employees involved with Space Data in 2008 subsequently interfaced with Mr. Weaver. *See, e.g.*, 8/12/2011 Gossett email, Ex. 97 to Opp'n, ECF 443-32; Ex. 56 to Opp'n, ECF 441-12; Ex. 101 to Opp'n, ECF 444-1. Mr. Weaver testified that he "d[id] not know" to what extent Space Data technical information bled into Project Daedalus (a prior name for Project Loon, *see, e.g.*, Ex. 103 to Opp'n, ECF 444-13). *See* Weaver Depo. at 25:9–13, Ex. 102 to Opp'n, ECF 444-3.

Viewing this collection of evidence in the light most favorable to Space Data, a reasonable trier of fact could find that Google improperly made use of Space Data's trade secrets. Whether the cost-per-balloon figures are sufficiently similar to show a relationship between Space Data's secret idea and Google's device depends on the nature of the technology and breakdown of the necessary elements, thus raising a genuine dispute of material fact.

In addition, Space Data memorialized its wind data as confidential shortly after the Tour. *See* 2/19/2008 Knoblach email (designating as confidential "[a]ny and all data provided about the winds at our operational altitudes"), Ex. 134 to Opp'n, ECF 444-37. Space Data presents evidence that this information was photographed during the Tour and included representations of trade secret wind data. *See, e.g.*, Ex. 60 to Opp'n, ECF 441-20; Knoblach Decl. ¶ 10, ECF 448-5; Knoblach Depo. at 380:14–19, Ex. 132 to Opp'n, ECF 444-33. Space Data argues that this evidence supports the inference that Loon makes use of trade secret data captured by Google during the Tour to achieve the same macro-level result—"fl[ying] balloons together using ambient winds alone to provide coverage." *See* Opp'n at 11. In response, Google argues that Space Data's assertion "is contradicted by the record" because Google's expert Dr. Hansman "reviewed the photos that Space Data cites and concluded that none 'depict any of the flight control and monitoring system screenshots claimed by Space Data to constitute or disclose its trade secrets.'" *See* Reply at 14 (quoting Hansman Rebuttal Expert Report ¶ 328, Ex. A to Hansman Decl., ECF 410-13). However, although potentially flawed, the Court finds that a reasonable trier of fact

could accept Space Data's explanation of the relevant disclosures and photographs notwithstanding Dr. Hansman's testimony, and thus a genuine dispute of material fact exists as to what the photographs revealed to Google or enabled Google to recall, *see* C*orales v. Bennett*, 567 F.3d 554, 562 (9th Cir. 2009). In other words, drawing all inferences for Space Data, [redacted] conclusion contained in the Wiki combined with its surrounding wind data and altitude disclosures were essentially a trade secret that Mr. DeVaul or other Google employees had access to and may have relied on in developing Loon.

The Court next addresses the parties' NDA, which sets forth the contours of Space Data's claim that Google improperly made use of Space Data's trade secrets in developing Loon. The NDA recognizes "that Google may in the future develop products or services related to or similar to the subject matter of the Confidential Information disclosed under [the NDA]." NDA ¶ 8, Ex. A to 5AC, ECF 434-1. I.e., the NDA explicitly permits Google to develop products "similar to" or "related to" Space Data's trade secrets or confidential information. However, as discussed previously in this section, the Court finds that Space Data has presented evidence sufficient for a reasonable jury to conclude that Google made use of Space Data's trade secrets in developing Loon. Google contends that regardless, "Google['s] use[] or disclos[ure] [of] any of Space Data's asserted trade secrets or other confidential information . . . does not raise a genuine issue for trial" because any such use or disclosure was a "Residual" under the NDA that Google was permitted to use "for any purpose." *See* Motion at 24.

The NDA provides that "Google may use Residuals"—i.e., Space Data information "**retained in the unaided memories of Google employees or Representatives** who had access to Confidential Information" under the NDA—"**for any purpose**, including without limitation, use in the acquisition, development, manufacture, promotion, sale, or maintenance of products and services." NDA ¶ 8 (emphasis added). The NDA instructs that "[a] person's memory is **unaided if such person has not intentionally memorized the Confidential Information** for the purpose of retaining and subsequently using or disclosing it." *Id.* (emphasis added).

The Court finds that Space Data has presented evidence sufficient for a reasonable jury to conclude that Space Data's confidential information was not merely "retained in the unaided

memories of Google employees." *See* NDA ¶ 8. For example (and not as an exhaustive list), the Wiki contained Space Data's confidential financial information, including financial statements and the [redacted] figure previously discussed. *See, e.g.*, Wiki, Ex. 50 to Opp'n, ECF 440-18. In addition, Google took numerous pictures during the Tour and Google employees took notes during the Tour. *See* Germinario Decl. ¶¶ 3–9, 11, ECF 448-6. While Space Data does not point to a particular photograph or set of notes that distinctly captures any one of Space Data's trade secrets in its entirety, a jury could reasonably infer that Google used the photographs or notes to recall or delineate the trade secrets that were disclosed during the Tour. In other words, a genuine issue of material fact exists as to whether the photographs or notes were used to "aid" Google's recall of Space Data's confidential information and trade secrets during Loon's development. Therefore, the Court finds that a reasonable trier of fact could conclude that the information allegedly used does not fall within the NDA's "Residuals" clause.

In conclusion, Space Data presents sufficient conflicting evidence and inferential evidence that a reasonable trier of fact could conclude that Google improperly used Space Data's trade secrets. Therefore, Space Data has raised a genuine issue of material fact. C*orales*, 567 F.3d at 562. The Court notes that at the Hearing, Google requested partial summary judgment (in the alternative to summary judgment in its entirety) on a trade-secret-by-trade-secret basis. *See* Hearing Tr. at 20:25–21:12, ECF 508. However, the Court does not read Google's Motion as requesting partial summary judgment on an individual or categorial basis, but rather as requesting summary judgment of no misappropriation whatsoever. *See* Motion at 1, 3, 18. Thus, Space Data was not properly on notice to oppose Google's motion on a more granular level, and the Court need not and does not rule individually or by category.

Accordingly, Google's motion for summary judgment as to trade secret misappropriation is DENIED.

D. Breach of Written Contract

As the Court has determined that a genuine issue of material fact exists as to trade secret misappropriation based on the alleged wrongful use of information shared under the parties' NDA, *see supra* Section IV.C, a genuine issue of material fact likewise exists as to Space Data's claim

for breach of the NDA. Accordingly, Google's motion for summary judgment of no breach of written contract (the parties' NDA) is DENIED.

V. ORDER

For the foregoing reasons, IT IS HEREBY ORDERED that:

1. Google's motion for summary judgment of non-infringement of the '193 patent is **GRANTED**.
2. Google's motion for summary judgment as to willful infringement of the '193 patent is moot. Google's motion for summary judgment as to willful infringement of the '706 patent is **DEFERRED** to consideration of whether attorney fees may be awarded by the Court, should the Court reach that issue.
3. Google's motion for summary judgment as to trade secret misappropriation is **DENIED**.
4. Google's motion for summary judgment as to breach of written contract (the NDA) is **DENIED**.

IT IS SO ORDERED.

Dated: May 9, 2019

BETH LABSON FREEMAN
United States District Judge

United States District Court
Northern District of California